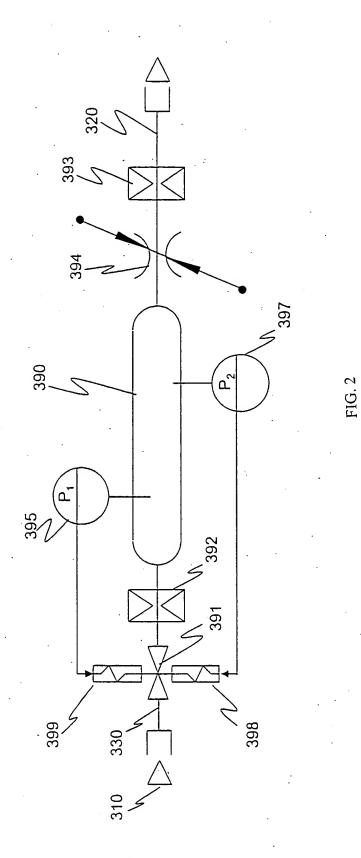
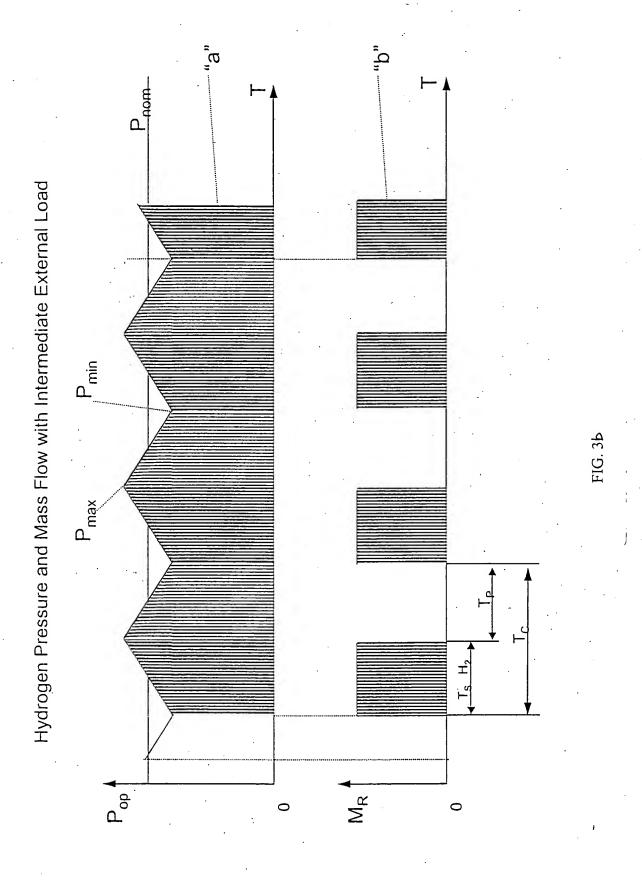


Fig.1

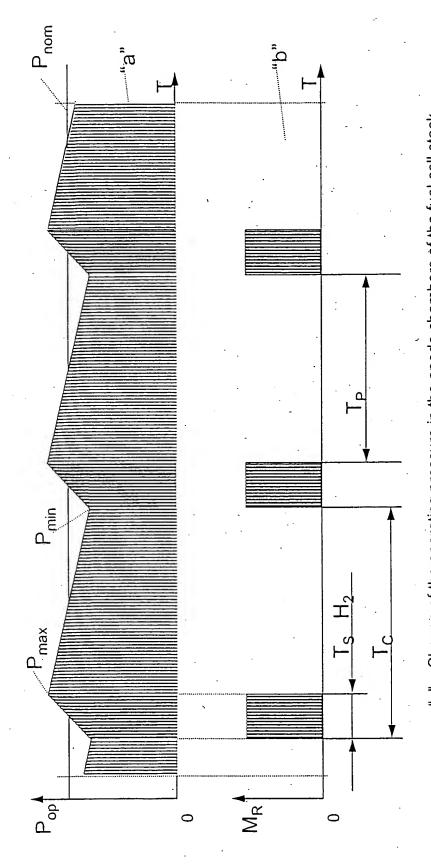


 $^{\prime}$ P $^{\prime}$ nom Pmin P<sub>max</sub>  $T_S H_2$ Pop MR 0

Hydrogen Pressure and Mass Flow with Maximum External Load



Hydrogen Pressure and Mass Flow with Minimal External Load



"a" - Change of the operating pressure in the anode chambers of the fuel cell stack "b" - Mass gas flow in the gas re-circulation loop

Pop - Operating Pressure
Pop - Maximum operating pressure
Pop - Minimum operating pressure
Pop - Nominal operating pressure
T - Time

Mass re-circulation flow
1<sub>2</sub> - H<sub>2</sub> supply time
Cycle time
Pause time

FIG. 3c